UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,662	06/08/2000	Richard Louis Arndt	AUS990939US1	9879

35525 7590 03/23/2004		EXAMINER	
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ART UNIT	PAPER NUMBER
2127	3

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/589,662	ARNDT, RICHARD LOUIS
	Examiner	Art Unit
	Kenneth Tang	2127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 September 2000</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-24 are presented for examination.

Specification

2.   The Cross Reference to Related Applications section of the specification needs to be

updated with the co-pending application's serial number and filing date.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   **Claims 7-11, 13-17, and 19-23 are rejected under 35 U.S.C. 102(e) as being**

anticipated by Zalewski et al. (hereinafter Zalewski) (US 2002/0016892 A1).

4.   As to claim 7, Zalewski teaches a method of configuring a set of services provided by a

hypervisor to a logically partitioned data processing system, the method comprising:

-      presenting a user with a set of service options, wherein the set of service options

        correspond to services performed by the hypervisor for each of multiple operating

        systems within the logically partitioned data processing system *(page 1, [0007]-[0008]*

        and page 10, [0152) such that processes performed by one of the multiple operating

systems do not interfere with processes performed by others of the multiple operating

systems *(page 14, [0219]-[0220])*;

- responsive to selection of a particular service option, storing the selected service option

    and presenting the service option to an operating system image as the operating system

    image is initialized *(page 4, [0039])*.

5.   As to claim 8, Zalewski teaches the claimed invention further comprising:

- responsive to loading a new version of the hypervisor, wherein the new version of the

    hypervisor contains additional services, reporting the additional services to each

    operating system upon re-initialization *(page 4-5, [0046])*.

6.   As to claim 9, Zalewski teaches the claimed invention wherein the operating system

image is initialized by booting *(page 13, [0184] and page 14, [0212])*.

7.   As to claim 10, Zalewski teaches the operating system to be initialized by booting *(page

13, [0184] and page 14, [0212])*. It is well known and obvious in order to initialize the

operating system again, you could boot again.

8.   As to claim 11, Zalewski teaches the claimed logically partitioned data processing system

wherein the hypervisor is implemented as firmware *(page 6, [0059] and applicant's admitted

prior art, page 2, lines 24-25)*.

9.   As to claims 13 and 19, it is rejected for the same reasons as stated in the rejection of

claim 7. In addition, the computer instructions are located within the operating system.

10.   As to claim 14, it is rejected for the same reasons as stated in the rejection of claim 8.

11.   As to claim 15, it is rejected for the same reasons as stated in the rejection of claim 9.

12.   As to claim 16, it is rejected for the same reasons as stated in the rejection of claim 10.

13.   As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 11.

14.   As to claim 20, it is rejected for the same reasons as stated in the rejection of claim 8.

15.   As to claim 21, it is rejected for the same reasons as stated in the rejection of claim 9.

16.   As to claim 22, it is rejected for the same reasons as stated in the rejection of claim 10.

17.   As to claim 23, it is rejected for the same reasons as stated in the rejection of claim 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18.   Claims 1-6, 12, 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Zalewski et al. (hereinafter Zalewski) (US 2002/0016892 A1) in view of Inoue et al.

(hereinafter Inoue) (US 5,437,033).

19.   As to claim 1, Zalewski teaches a logically partitioned data processing system,

comprising:

- a plurality of operating systems, each assigned to a separate one of a plurality of logical

  partitions *(see Abstract)*;

- a hypervisor for creating and enforcing separation between each of the plurality of logical

  partitions *(page 4, [0035])*;

Zalewski fails to explicitly teach:

- wherein the hypervisor includes a plurality of functions sets, each function set including a

  list of functions which may be called by any one of the plurality of operating systems to

  perform a task while maintaining separation between each of the plurality of logical

  partitions, the hypervisor informs each of the plurality of operating systems of an enabled

  function set, wherein functions identified within the enabled function set are enabled for

use by each of the plurality of operating systems and functions not identified within the

enabled function set are disabled for use by each of the plurality of operating systems.

20.   However, Inoue teaches using a virtual machine monitor such as a hypervisor that

interacts with a table comprising data for control operations/functions, which are enabled when

dispatched by the virtual machine *(col. 1, lines 21-40, col. 2, lines 28-31, col. 3, lines 50-61)*. It

would have been obvious to one of ordinary skill in the art at the time the invention was made to

include the feature of a hypervisor that interacts with a table comprising data for control

operations/functions, which are enabled because using a data table is a standard method to access

and utilize data and needed for control functions/operations to occur.

21.   As to claim 2, Inoue teaches the claimed logically partitioned data processing system,

wherein the enabled function set from the plurality of function sets may be changed such that a

different one of the plurality of function sets becomes the enabled function set *(col. 1, lines 21-

40, col. 2, lines 28-31, col. 3, lines 50-61)*.

22.   As to claim 3, Zalewski teaches the claimed logically partitioned data processing system

wherein additional function sets may be added to the plurality of function sets as additional

functions are added to the plurality of functions provided by the hypervisor *(page 4-5, col.*

[0046]).

23.   As to claim 4, Zalewski teaches the claimed logically partitioned data processing system wherein the hypervisor is implemented as firmware *(page 6, [0059] and applicant's admitted prior art, page 2, lines 24-25)*.

24.   As to claim 5, Zalewski in view of Inoue fails to explicitly teach the claimed logically partitioned data processing system wherein each of the plurality of function sets comprises a different group of the plurality of functions. However, it is well known and obvious that the functions located in different instances are also in a different group.

25.   As to claim 6, Zalewski teaches the claimed logically partitioned data processing system wherein optional functions are omitted from at least one of the plurality of function sets *(page 4-5, col. [0046])*.

26.   As to claim 12, Inoue teaches the claimed method wherein the set of services comprise a table of function sets and each of the function sets, upon selection, enables a subset of functions, provided by the hypervisor, for use by each of the multiple operating systems *(col. 1, lines 21-40, col. 2, lines 28-31, col. 3, lines 50-61)*.

27.   As to claim 18, it is rejected for the same reasons as stated in the rejection of claim 12.

28.   As to claim 24, it is rejected for the same reasons as stated in the rejection of claim 12.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The

examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
3/16/04

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